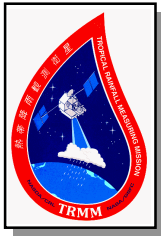


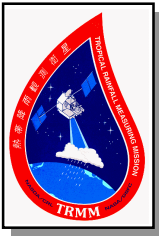
TRMM Monthly Status Briefing

September 6th, 2000



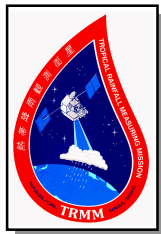
FOT Overview

- Operations Status - Engineering Staff
 - Flight Ops Summary - Lou Kurzmilller
 - Electrical, & Thermal - Andy Calloway
 - ACS & FDS / C&DH / RCS - Mark Fioravanti
 - Power, Deployables, RF / Comm - Justin Knavel
 - CERES & VIRS - Mark Fioravanti
 - LIS, TMI, & PR - Andy Calloway
 - Ground System - Andy Calloway
 - Upcoming Activities - Andy Calloway



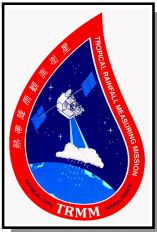
Flight Operations Summary

- Supported 548 SN events in August
 - 1 Yaw Maneuver
 - 8 Delta-V Maneuvers
- 9 Event Rpts & 4 Generic Late Acq Rpts generated
 - ER #191: WSGT link problem; data dropouts
 - ER #192, 196, 198: MOC H/W; String 1 crash
 - ER #193: MOC H/W; pwr supply problem TR2WS1
 - ER #194: MOC H/W; FEP1 crash
 - ER #195: MOC S/W; directory deleted on Strings 1 & 2
 - ER #197: Bldg-32 UPS-2 power failure & TR2WS2 pwr supply
 - ER #199: SN Confirmed event taken (higher priority user)



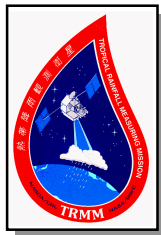
Flight Operations Summary

- Notable Events
 - B-32 UPS Power reconfiguration completed
 - System Software Rel 8.1 installed on String 2
 - Formats Rel8b5v1 installed on String 3 (TDRS-8 support)
- Staffing
 - Stable; training continues for new personnel
 - » Three Console Analyst certifications expected
 - » One Spacecraft Analyst certification expected



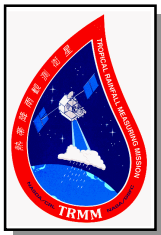
Flight Ops Summary

CSOC SPECIAL EVENTS FOR TRMM 2000													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
2	6	8	10	13	9	7	9	8					70
2a	1	1	2	1	1	1	2	1					10
2b	0	0	0	0	0	0	0	0					0
2c	0	0	0	0	0	0	0	0					0
3	2	1	0	1	2	2	2	2					12
3a	5	1	3	7	4	4	2	4					30
3b	3	1	2	4	4	3	3	6					26
3c	0	3	2	2	0	0	2	0					9
3d	1	0	1	0	0	0	0	0					2
3e	0	0	0	0	0	0	0	0					0
3f	6	1	3	3	5	2	2	4					26
4	3	3	0	3	3	5	0	2					19
4a	2	2	2	2	2	2	2	2					16
4b	1	2	2	1	2	1	1	2					12
4c	0	7	21	23	10	19	12	3					95
4d	11	0	4	1	4	2	4	1					27
4e	0	0	0	0	0	0	0	0					0
5	26	6	4	5	16	11	9	5					82
5a	0	0	4	0	1	4	2	0					11
5b	3	3	2	3	0	0	2	1					14
5c	0	0	0	0	0	0	0	0					0
8	0	0	0	0	0	0	0	0					0
8a	0	0	0	0	0	0	0	0					0
TOT:	70	39	62	69	63	63	54	41	0	0	0	0	461
LEGEND													
CSOC CATEGORIES				TRMM SUB-CATEGORIES AND EXAMPLES									
1	Targets of Opportunity			N/A									
2	S/C Maneuvers			DeltaVs (2) , 180° Yaw Maneuvers (2a) , 90° Yaws (2b) , Deep Space Cals (2c)									
3	Unplanned Events			Blind Acqs (3) , Patch Loads (3a) , Manual DS Ops - Blind Acqs, MI, H/W Problems (3b) , EPV Fail Ops (3c) VIRS Reset Recoveries (3d) , Anomaly Recoveries (3e) , Generic Late Acqs - GCMRs and Manual DS Ops (3f)									
4	Customer Requests			PR (4) , VIRS (4a) , LIS (4b) , CERES (4c) , FSW (4d) , AETD (4e)									
5	Celestial Phenomena			VIRS Heater Ops (5) , Power Ops - Autospru, TSMs, C/D (5a) , UTCF / FS Ops (5b) , Leonids Ops (5c)									
6	Pre-Launch Testing			N/A									
7	L&IOC Operations			N/A									
8	EOL Operations			Delta-H Firings (8) , Reentry Maneuvers (8a)									



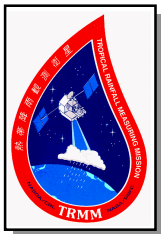
Thermal / Electrical Subsystems

- Thermal and Electrical subsystems remain nominal with no open issues
- FOT will assist AETD as needed for End Of Life Thermal Analysis
 - What is lowest attainable perigee which still meets thermal survivability constraints
 - What are the thermal constraints, if any, of long duration burns



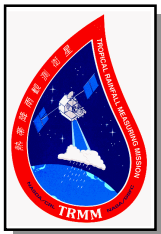
ACS Subsystem

- Open CCRs (In order of Priority);
 - CCR #069: New tables 85 to match new TDRS-8 continuity limits for other TDRS, and another table 85 to widen the limits after an update failure.
 - CCR #070: New version of Table 61 to incrementally pitch the S/C while in SunAcq.
 - CCR #005: Correction for Magnetic Field Epoch, will be required for EOL if apogee is greater than 400 km.
 - CCR #065: Update ACS system tables in preparation for EOL activities.
 - » Table #73 (Thruster Parameters)
 - » Table #90 (Mode Configuration Data for Contingency)
 - CCR #053: ACS FS/W bug



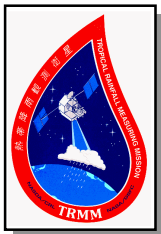
FDS/C&DH Subsystems

- UTCF Status;
 - Adjustment was performed on 00-233 (Sunday, August 20, 2000)
 - New UTCF value is 31535996.841021 sec
 - Current FS value is x'7a2'
- Open CCRs;
 - CCR #034: Writing from RAM to EEPROM for new TSM table #21 and RTSs # 2, 3, 13, 14, and 15. Completed, only need final documentation.
 - CCR #047: Will work with FSW on no-clock software patch activities
 - CCR #048: New on-board DS filter table to record ACE 8-Hz data
 - CCR #071: Build a new DS quota table (73) to reallocate CERES science memory to other instruments, contingent on powering CERES off.



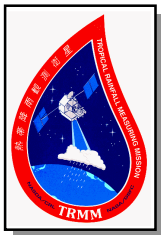
RCS Subsystem

- RCS performed 8 successful Delta-V maneuvers (#215 - #222)
- EOL worst case is **September, 2003**, pending revised EOL scenario
 - Current fuel remaining is 536.8444 kg
- No Open RCS Anomaly or Event Reports
- Upcoming Events
 - None



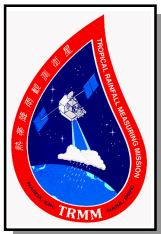
Power Subsystem

- PSIB auto-SPRU operations
 - Currently, Auto-SPRU is disabled
 - Monitor system with Code 563 close to Beta $\pm 58^\circ$ (late November)
- No open issues



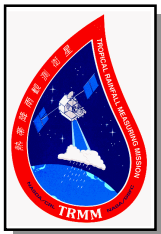
Deployables Subsystem

- -Y solar array drive temperature and behavior continues to be closely monitored
- Solar array drives and HGA continue to operate nominally
- No open issues other than to concentrate on array behavior and contingency training with all FOT members



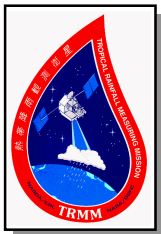
RF Subsystem

- 4 Generic Late Acquisitions (#65, #66, #67, & #68)
- Frequency offset Transponder #1 = **690.322** Hz (average)
- Frequency offset Transponder #2 = **-792.282** Hz (average)
- No open RF Anomaly or Event Reports
- Upcoming Events
 - Offset of transponder frequencies likely within 6 months



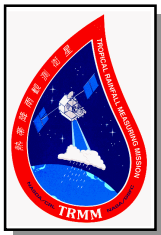
CERES Instrument

- Data Acquisition Processor (DAP) Telemetry Drop Out and Possible Failure (Anomaly #81)
 - Recovery to science collection is not likely, but Langley does *NOT* want to power it off.
- Open Issues
 - DAP Telemetry Drop Out (Anomaly #81)
- Issues on Hiatus
 - Continuous Biaxial operations
 - DR on MP ground system to incorporate new CERES requirements



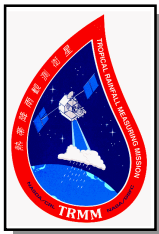
VIRS Instrument

- 2 Solar Calibrations were performed on 00-230 (Thursday August 17th, 2000)
- Blackbody temperature is now being maintained between 8 °C and 16 °C



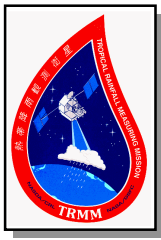
LIS Instrument

- Routine MSFC real-time command requests performed on 00-217 and 00-234 (CR #416 and #417) to reduce packet sequence errors
- No open issues



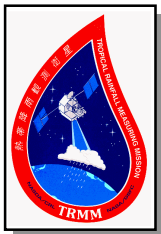
TMI / PR Instruments

- No concerns or open issues for TMI
- PR Activities:
 - External Calibrations were performed on 08/02 and 08/03 (00/215 & 00/216) for bin angles 39 and 33 respectively.
- PR Open Issues
 - Frequency Agreement Renewal activities continue
 - » New interference was reported by NASDA in August which occurred during flyovers of Pakistan and Peru on 07/15 (00/197) and 07/25 (00/207) respectively
 - » The summary spreadsheet of PR Interference occurrences through April 2000 was delivered by NASDA in August



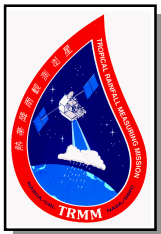
Ground System

- MOC Power Configuration Complete Following August Power Outage
 - All String-3 Components are now on UPS-5
- Several Hardware Component Failures in August
 - Two HP Workstation Power Supplies (String-2)
 - One Tape Drive (String-1)
 - Two Monitors (String-1 and String-3)
- New Formats Installed and Operational on String-3 (TDRS-8 support)
- System Software Release 8.1 Fully Operational on Strings 2 and 3
- Hard Drive mounted on String-2 to support XTE MOC Failover Scenario



Upcoming Activities

- 0-2 Months
 - Ensure FOT training remains top priority
 - System Software Release 8.1 implementation on String 1
 - GITT Security Scan vulnerability implementation on Strings 1 and 3
 - New FDF Product deliveries which will incorporate new TDRS-8 data
 - Completion of TRMM/XTE MOC failover implementation
 - New User Planning System (UPS) Release 13
 - Continue to close open CCRs, MOCRs, ERs, ARs, and MSR Action Items



Upcoming Activities

- 2-3 Months
 - Begin testing and using the new TDRS-8
 - Leonids Operations (11/2000)
 - Leap Year Transition for DOY 366 - No Leap Second Adjustment
- 3-12 Months
 - Extended Mission Operations Begin (1/2001)
 - Test, validate, and accept the new PACOR-A system
 - Begin End Of Life Planning, Testing, and Simulations
 - Commence DSN/GN FOT training
 - Testing of new PTP hardware and software deliveries
 - System Software Release 8.2 Delivery
 - Transponder Offset Activities